**REPORT ON FIELD DAYS CONDUCTED IN AFRICA RISING SITES IN MACHINGA, NTCHEU AND DEDZA DISTRICTS FROM 4th to 6th MARCH 2020**



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# INTRODUCTION

Each year, we conduct field days between peak crop vegetative-to early reproductive stage, and at crop physiological maturity. This year we managed to conduct only three fields days during early March. Field days that were planned in April had to be cancelled due to the COVID19 pandemic as social distancing was enforced.

To enhance the learning process among farmers who are part of the Africa RISING project, as well as farmers within the vicinity of the projects intervention sites, Africa RISING organized field days in Mtubwi, Nsipe and Linthipe in Machinga, Ntcheu and Dedza districts respectively.. Field days have been a core activity of the project in Malawi since its inception where participating farmers come together and invite non participating farmers to share knowledge and lessons from the on-farm research trials and baby trials.

# Field days summaries

## Mtubwi EPA field day

In Mtubwi EPA, showcasing of three SI technologies was done. The visited fields were 1) the residue management mother trial field, 2) a doubled-up legume baby farmer field and 3) the N- response mother trial field. At all the three sites visited, discussions were done on the various treatments under research, fertilizer application procedures and most importantly how the mother trial fields are helping in extending knowledge to the baby farmers under each mother trial. In the groundnut stand, much importance was also given to the double benefits the farmer gets from harvesting two crops as well as increased benefit of more legume biomass from groundnut and pigeon peas. The farmers also hailed the increased plant population they achieve by practicing double row planting for groundnuts.



*Farmers viewing intensified groundnut production through double row groundnut planting*

**Lessons**

During the field day discussio time, the participants expressed the following lessons:

* Doubled up legume planting has helped them harvest from same field, two of the most important legumes that make up most of their diet in southern Malawi.
* Crop residue incorporation has helped them to improve soil fertility – farmers described legume crops as fertilizers in their own right
* Reduced ridge spacing has helped them to increase plant population on their farms resulting in better yields unlike in the past when they made their ridges very wide.
* Double row planting of legumes has also led to increased plant population which in turn has improved their legume yields
* Maize-legume rotation has led to improved maize yields even with minimal fertilizer application rates

Among the speakers, one notable observation made by the Group village headman was that since the project was introduced in the area, the area has seen increased production of groundnuts, a thing that was unheard of in the past.

## Nsipe EPA field

In Nsipe EPA, the farmers showcased 2 stands. The main stand was the Water and Nutrient management mother trial where various treatments under the trial were showcased. The owner of the water and nutrient management trial field explained in detail about the treatments under research on the field. He emphasized on the doubled-up legume planting and its benefits through increased nitrogen inputs from the 2 legumes residues, importance of the water management being achieved by the construction of tied-ridges. The second stand visited was a soyabean field managed by a baby farmer. The baby farmer explained about ridge spacing, inoculation of soyabean before planting, double row planting and plant spacing.



*One of the farmers showing how doubled-up legume cropping does not affect the growth of either of the two legumes grown together.*

**Lessons**

The farmers expressed the following lessons during discussion session:

* Importance and benefits of constructing box ridges for water conservation –every farmer to try this in their own fields. More water is trapped in the field as opposed to toom much runoff and soil loss
* The benefits of soyabean for total nutrient improvement to a human nutrition, especially children
* From soyabean production and nutrition training from Africa RISING, they have learnt how to prepare different nutritious products using soya.
* Learning about soybean inoculation and practicing it has helped them improve their soybean production.
* Practicing crop rotation is beneficial because it leads to reduced use of inorganic fertilizer in the rations.

**Some key highlights from Nsipe**

* One of the baby farmers, Baison LIkongwe has been able to build a house and purchased furniture through soyabean production, which he started growing following lessons from Africa RISING activities.
* One of the notable statements came from the chairperson of the Africa RISING farmers who encouraged farmers to concentrate on the benefits of co-learning that happens when they meet at the mother trial with government extension and Africa RISING staff. He discouraged farmers from developing over reliance on government or NGO food handouts.
* The village head also encouraged the farmers to be individually committed to learning and adopting the technologies promoted under the Africa RISING research.

## LINTHIPE EPA

In Linthipe, the farmers visited 4 stands. The first stand visited was the Sustainable Intensification mother trial field, followed by a groundnut seed multiplication field, baby farmer groundnut field and a soybean seed multiplication field.



*A cross section of the participants viewing a groundnut and soybean seed multiplication fields*

Lessons

The following are the lessons as expressed by the farmers during field day processing

* Co-learning from the mother trial fields has helped them to follow improved technologies in their fields.
* Practicing double row legume planting has helped them to have higher yields than before due to the increased plant population, enhanced moisture containment and pest infestation prevention
* Their soils have been replenishing since they started practicing maize-legume rotation as learnt from Africa RISING activities.

**LIST OF PARTICIPANTS**

|  |  |  |  |
| --- | --- | --- | --- |
| **EPA** | **MALE** | **FEMALE** | **TOTAL** |
| MTUBWI | 35 | 74 | **109** |
| NSIPE | 34 | 36 | **70** |
| LINTHIPE | 30 | 71 | **101** |

**Partners in attendance**

* All EPA staff ( from all EPAs)
* Machinga District Stakeholder Panel Vice Chair - Mtubwi
* Malawi Drought Resistance and Resilience Program -Mtubwi
* Bayer Malawi (Formerly Monsanto)- Linthipe
* Village Agricultural Committee members – All EPAs
* Village Development Committee members –All EPAs
* Group Village Heads – All EPAs
* Village Heads –All EPAs